



# Iowa Office of the State Medical Examiner



## Annual Report 2012

## 2012 Annual Report

# Iowa Office of the State Medical Examiner

2250 South Ankeny Boulevard  
Ankeny, Iowa 50023-9093

Telephone: 515-725-1400

Fax: 515-725-1414

<http://www.iosme.iowa.gov/>

Julia C. Goodin, MD  
State Medical Examiner

Dennis F. Klein, MD  
Deputy State Medical Examiner

Michele J. Catellier, MD  
Associate State Medical Examiner

Jonathan G. Thompson, MD  
Associate State Medical Examiner

Marcus Nashelsky, MD  
Assistant State Medical Examiner (U of I employee)

Dennis Firchau, MD  
Assistant State Medical Examiner (U of I employee)

## **INTRODUCTION**

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The Iowa Office of the State Medical Examiner was established in 1976. In May 1999, Governor Thomas J. Vilsack signed legislation approving the move of the office from the Department of Public Safety to the Department of Public Health.

The primary role of the office is to provide support, guidance, education, consultation, and training to county medical examiners and their investigators. County medical examiners investigate violent, suspicious, and unexpected natural deaths that occur in their counties. Upon a county medical examiner's request, the Iowa Office of the State Medical Examiner will assist at the death scene and perform the autopsy.

The Iowa Office of the State Medical Examiner is committed to providing tireless support, education, consultation, and training to each of the county medical examiner offices in order to assist them in the investigation of deaths throughout the state.

## **MISSION STATEMENT**

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The mission of the Iowa Office of the State Medical Examiner is:

*To establish credibility in death investigation in a system that will operate efficiently and serve the needs of the citizens of Iowa.*

## **STATE MEDICAL EXAMINER ADVISORY COUNCIL**

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The State Medical Examiner Advisory Council was established in 1999 via Iowa Code 691.6C. This Council was established to “advise and consult with the state medical examiner on a range of issues affecting the organization and functions of the office of the state medical examiner and the effectiveness of the medical examiner system in the state.”

The Advisory Council meets on a biannual basis and is currently holding meetings by ICN and in person with origination at the Iowa Office of the State Medical Examiner conference room.

Membership is determined by Dr. Julia Goodin, State Medical Examiner, in consultation with Dr. Mariannette Miller-Meeks, Director, Iowa Department of Public Health.

Current membership is:

**Gary Baumbach, MD** – University of Iowa, Department of Pathology

**Scott Brown** – Attorney General’s Office

**Thomas Carroll, MD** – Iowa Association of Pathologists

**Chris Corken** – Iowa County Attorney’s Association

**James Fullerton** – Iowa Funeral Directors Association

**Julia Goodin, MD** – State Medical Examiner

**Keith Hansen, DO** – Iowa Association of County Medical Examiners

**Dennis Klein, MD** – Deputy State Medical Examiner

**Dennis Mallory, DO** – Iowa Medical Society

**Mariannette Miller-Meeks, MD** – Director, Iowa Department of Public Health

**Bruce Reeve** – Iowa Department of Public Safety

**Thomas Summitt** – Iowa Emergency Medical Services Association

**Kurt Swaim** – Iowa Public Defender’s Office

## **INTERAGENCY COORDINATING COUNCIL**

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The Interagency Coordinating Council was created by the Iowa Legislature in 1999 with the purpose to advise the state medical examiner concerning the assurance of effective coordination of the functions and operations of the Office of the State Medical Examiner with the needs and interests of the Departments of Public Safety and Public Health [IA Code 691.6B].

Members of the Interagency Coordinating Council include the state medical examiner; the commissioner of Public Safety, the director of Public Health, and the governor, or a representative designated by the member.

The Interagency Coordinating Council meets on a biannual basis.

The current members of the Interagency Coordinating Council are:

**Michael Bousselot, Esq.** – Policy Advisor, Governor’s Office

**Julia Goodin, MD** – Chief State Medical Examiner

**Dennis Klein, MD** – Deputy State Medical Examiner

**Gerard Meyers** – Assistant Director of Field Operations, Division of Criminal Investigation

**Mariannette Miller-Meeks, MD** – Director, Iowa Department of Public Health

## **COUNTY MEDICAL EXAMINERS**

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The primary function of the county medical examiner is to determine a truthful, logical, and scientifically unbiased statement of the cause and the manner of death. (Iowa Code 331.801-805 and Administrative Code 641-127 govern county medical examiner activities).

County medical examiners are uniquely qualified to investigate the deaths of individual citizens in their counties, not only because of their medical training, but also by virtue of the fact they usually live and work in the counties in which they serve. County medical examiners must display uncompromising honesty, integrity, and loyalty to their community and their oath, regardless of any pressure they may receive from outside sources.

The county medical examiner of any of the counties is a physician appointed by the Board of Supervisors of that county to act in an official capacity to investigate and make a report of any death as described in Iowa Code section 331.802(3).

The county medical examiner shall be licensed in this state as a doctor of medicine and surgery, a doctor of osteopathic medicine and surgery, or an osteopathic physician.

The county medical examiner shall be appointed, from lists submitted by the medical society and the osteopathic society of the particular county, for a period of two years (a period of time that shall commence on January 1, if it is not a Sunday). If a qualified physician in the particular county cannot be identified, the Board of Supervisors may appoint a physician from outside the particular county.

The county medical examiner is required by law to make inquiry into the cause and manner of death of any individual meeting the criteria outlined in Iowa Code section 331.802(3) and make a report of this to the state medical examiner, the county attorney where the incident occurred and/or any law enforcement agency having jurisdiction.

The county medical examiner shall make a determination as to the most probable cause and manner of death, and issue the death certificate for those deaths within their jurisdiction as outlined by the statute.

The county medical examiner will determine if an autopsy is needed, and will make a written request.

The county medical examiner shall issue permits as required by the county and/or state which are necessary for the disposition of a dead body (to include cremation and embalming permits).

It is unreasonable to believe any county medical examiner is willing and able to respond to a death scene 24 hours a day/seven days a week. Therefore, that county medical examiner is authorized to appoint deputy or assistant county medical examiner and county medical examiner investigators to assist him/her in the fulfillment of his/her duties.

These deputy medical examiners must be physicians who are licensed in the state of Iowa and who have been approved for service by the state medical examiner. The county medical examiner is responsible to train and/or secure training for his/her deputies.



## **FACILITY**

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A laboratory facility housing the IOSME also houses the Department of Public Safety, Agriculture & Land Stewardship, and the University of Iowa Hygienic Laboratory. It opened in March 2005 on the Des Moines Area Community College (DMACC) campus in Ankeny, Iowa.

The facility allows the IOSME to house both the office and the morgue in one building allowing the SME to maintain accreditation with the National Association of Medical Examiners, aiding recruitment of high quality workers and federal grant eligibility.

The facility improves services provided by the IOSME and provides the capabilities to:

- ❖ Perform complex autopsies efficiently in a biologically safe and physically secure facility.
- ❖ Protect and secure evidence and records for criminal cases in a manner that meets or exceeds stringent court scrutiny as well as state and national standards.
- ❖ Operate cooler space for deceased individuals awaiting identification and/or autopsy.
- ❖ Handle multiple deaths as necessary for disaster preparedness, including infectious diseases or mass disasters.

The IOSME staff is available to perform autopsies and assist with medicolegal death investigations 24 hours per day, 7 days per week, 365 days per year.

## **REPORTABLE DEATHS**

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As per Iowa Code 331.802(3), certain types of deaths are to be reported to the county medical examiner. A medical examiner death is defined as a death that affects the public interest and is unexpected, unexplained, and/or unwitnessed. These are deaths that affect the public interest and include, but are not limited to, any of the following:

- a. Violent death, including homicidal, suicidal, or accidental death.
- b. Death caused by thermal, chemical, electrical, or radiation injury.
- c. Death caused by criminal abortion including self-induced, or by sexual abuse.
- d. Death related to disease thought to be virulent or contagious which may constitute a public hazard.
- e. Death that has occurred unexpectedly or from an unexplained cause.
- f. Death of a person confined in a prison, jail, or correctional institution.
- g. Death of a person who was prediagnosed as a terminal or bedfast case who did not have a physician in attendance within the preceding thirty days; or death of a person who was admitted to and had received services from a hospice program as defined in section 135J.1, if a physician or registered nurse employed by the program was not in attendance within thirty days preceding death.
- h. Death of a person if the body is not claimed by a relative or friend.
- i. Death of a person if the identity of the deceased is unknown.
- j. Death of a child under the age of two years if death results from an unknown cause or if the circumstances surrounding the death indicate that sudden infant death syndrome may be the cause of death.

## **STATUTORY DUTY STATE MEDICAL EXAMINER**

Iowa Code 691.5-6C and Administrative Rule 641-126 govern the Iowa Office of the State Medical Examiner. Autopsies are performed at the request of county medical examiners for those deaths that are reportable. The duties of the state medical examiner are:

1. To provide assistance, consultation, and training to county medical examiners and law enforcement officials.
2. To keep complete records of all relevant information concerning deaths or crimes requiring investigation by the state medical examiner.
3. To adopt rules pursuant to chapter 17A, and subject to the approval of the Director of Public Health, with the advice and approval of the State Medical Examiner Advisory Council.
4. To collect and retain autopsy fees as established by rule. Autopsy fees collected and retained under this subsection are appropriated for purposes of the state medical examiner's office. Notwithstanding section 8.33, any fees collected by the state medical examiner that remain unexpended at the end of the fiscal year shall not revert to the general fund of the state or any other fund but shall be available for use for the following fiscal year for the same purpose.
5. To conduct an inquiry, investigation, or hearing and administer oaths and receive testimony under oath relative to the matter of inquiry, investigation, or hearing, and to subpoena witnesses and require the production of records, papers, and documents pertinent to the death investigation. However, the medical examiner shall not conduct any activity pursuant to this subsection, relating to a homicide or other criminally suspicious death, without coordinating such activity with the county medical examiner, and without obtaining approval of the investigating law enforcement agency, the county attorney, or any other prosecutorial or law enforcement agency of the jurisdiction to conduct such activity.
6. To adopt rules pursuant to chapter 17A relating to the duties, responsibilities, and operations of the office of the state medical examiner and to specify the duties, responsibilities, and operations of the county medical examiner in relationship to the Office of the State Medical Examiner.
7. To perform an autopsy or order that an autopsy be performed if required or authorized by section 331.802 or by rule. If the state medical examiner assumes

jurisdiction over a body for purposes of performing an autopsy required or authorized by section 331.802 or by rule under this section, the body or its effects shall not be disturbed, withheld from the custody of the state medical examiner, or removed from the custody of the state medical examiner without authorization from the state medical examiner.

8. To retain tissues, organs, and bodily fluids as necessary to determine the cause and manner of death or as deemed advisable by the state medical examiner for medical or public health investigation, teaching, or research. Tissues, organs, and bodily fluids shall be properly disposed of by following procedures and precautions for handling biologic material and bloodborne pathogens as established by rule.
9. To collect and retain fees for medical examiner facility expenses and services related to tissue recovery. Fees collected and retained under this subsection are appropriated to the state medical examiner for purposes of supporting the state medical examiner's office and shall not be transferred, used, obligated, or otherwise encumbered. Notwithstanding section 8.33, any fees collected by the state medical examiner shall not revert to the general fund of the state or any other fund.

## **STATUTORY DUTY DEPUTY STATE MEDICAL EXAMINER**

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Iowa Code 691.6A governs the Deputy State Medical Examiner creation and duties.

The position of deputy state medical examiner is created within the Office of the State Medical Examiner. The deputy state medical examiner shall report to and be responsible to the state medical examiner. The deputy state medical examiner shall meet the qualification criteria established in section 691.5 for the state medical examiner and shall be subject to rules adopted by the state medical examiner as provided in section 691.6, subsection 3.

The state medical examiner and the deputy state medical examiner shall function as a team, providing peer review as necessary, fulfilling each other's job responsibilities during times of absence, and working jointly to provide services and education to county medical examiners, law enforcement officials, hospital pathologists, and other individuals and entities.

The deputy medical examiner may be, but is not required to be, a full-time salaried faculty member of the Department of Pathology of the University of Iowa College of Medicine. If the medical examiner is a full-time salaried faculty member of the Department of Pathology of the University of Iowa College of Medicine, the Iowa Department of Public Health and the State Board of Regents shall enter into a chapter 28E agreement to define the activities and functions of the deputy medical examiner, and to allocate deputy medical examiner costs, consistent with the requirements of this section.

## **ORGAN AND TISSUE DONATION ACTIVITIES**

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Dialogue between the Iowa Donor Network (IDN) and the IOSME continues to improve. As the number of tissue donations increases, the availability of the IOSME tissue recovery suite continues to allow recoveries to take place more smoothly.

During the 2006 Legislative session, HF2768 was introduced and signed into law by Governor Vilsack. Subsection 8 in Iowa Code 691.6 allows the State Medical Examiner's Office to collect and retain fees for the expenses and services related to tissue recovery. These fees help offset the expense with the use of the tissue recovery suite.

Iowa Donor Network basic criteria and procedures for potential donors are included in the County Medical Examiner's Handbook. The IOSME and IDN continue to improve communications to ensure a successful relationship that provides an essential service to the public.

See the following two pages for IDN statistical data.

# IOWA DONOR NETWORK REFERRALS



## **Non-Hospital Death Activity Report**

2012

Referral and Donor Activity Report

\*Hospice and Nursing Home Deaths are not included

Referring Agency	Referrals	Tissue Donors
Adams County Ambulance	1	1
Adams County Medical Examiner	1	0
Appanoose County Medical Examiner	2	1
Area Ambulance Service	10	2
Area Ambulance Service of Buchanan County	1	0
Blackhawk County Medical Examiner's Office	11	2
Buena Vista County Medical Examiner	2	0
Burlington Fire Department	2	0
Calhoun County Medical Examiner	11	1
Carlisle Fire Department	1	0
Carroll County Medical Examiner	1	0
Cass County Medical Examiner	2	1
Cedar County Medical Examiner	13	2
Cerro Gordo County Medical Examiner	23	3
Clarke County EMS	3	0
Dallas County EMS	3	0
Dallas County Medical Examiner	11	3
Des Moines County Medical Examiner Office	23	2
Dubuque County Medical Examiner's Office	11	2
EMS Service	1	0
Franklin County Medical Examiner	2	1
Franklin Gen Hosp EMS	1	0
Grimes Fire and Rescue Department	1	0
Hardin County Medical Examiner	4	2
Harrison County Medical Examiner	3	0
Henry County Medical Examiner	16	3
Iowa County Ambulance	1	0
Iowa County Medical Examiner	3	0
Iowa Office of the State Medical Examiner	313	20
Jackson County Medical Examiner	3	1
Jasper County Medical Examiner	11	1
Jefferson County Medical Examiner	7	1

Referring Agency	Referrals	Tissue Donors
Johnson County Medical Examiner	29	7
Johnston Fire Department	3	0
Jones County Medical Examiner	5	2
Keokuk County EMS	1	0
Keokuk County Medical Examiner	8	1
Kossuth County Medical Examiner	8	1
Lakes Regional Healthcare EMS	6	1
Lee County Ambulance	1	1
Lee County Medical Examiner	3	0
Linn County Medical Examiner	72	17
Louisa County Medical Examiner	2	0
Mahaska County Medical Examiner	3	0
Marion County Medical Examiners Office	3	0
Marshall County Sheriff's Department	1	0
Midwest Ambulance Service of Iowa - Des Moines	1	0
Mobile Intensive Care Services - Mary Greeley	1	0
Monticello Ambulance	1	0
Muscatine County Medical Examiner	44	4
New Virginia Fire Department	1	0
Oxford Junction Ambulance	1	1
Palo Alto Ambulance Service	2	0
Palo Alto County Medical Examiner	5	1
Pella Community Ambulance	2	0
Pfannebecker Funeral Home Inc	1	0
Pleasant Hill Fire Department	1	0
Pocahontas County Medical Examiner	2	0
Pocahontas EMS	2	0
Polk County Medical Examiner	102	11
Pottawattamie County Medical Examiner	76	5
Reg. HS Howard County EMS	1	0
Reiff Funeral Home - Independence	1	0
Scott County Medical Examiner's Office	8	0
Shellsburg First Responders	3	0
Siouxland Paramedics	58	3
Spencer Hospital Ambulance	1	0
Story County EMS	2	0
Story County Medical Examiner	1	0
Wapello County Medical Examiner	14	2
Warren County Medical Examiner	9	0
Washington County Medical Examiner	10	2
West Des Moines EMS	3	0
<b>Total</b>	1259	128



### **Total Statewide Referrals (Out of Hospital) – 1259**

<b>Organ Referrals</b>		<b>Tissue Referrals</b>	
Organ Donors	61	Tissue Donors	128
Family Declines	6	Family Declines	88
Patients Not Brain Dead	433	Consented Not Recovered	62
Not Medically Suitable	121	No Next-of-Kin Found	19
Cardiac Arrested on Vent	35	Not Medically Suitable	855
Consented Not Recovered	2	Medical Examiner Decline	105
Medical Examiner Decline	0	Deeded Body Donor	2
Referred, Survived	75	Referred, Survived	0

IOSME was involved in 121 Tissue Donation cases, either pre or post autopsy.

Iowa Donor Network recovered 61 cases at the IOSME Recovery Suite.

Iowa Donor Network collaborated on 75 hospital and out-of-hospital referrals to ensure donation was a possibility.

## **NATIONAL ASSOCIATION OF MEDICAL EXAMINERS (NAME)**

### **ACCREDITATION**

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The IOSME received accreditation from NAME in 2008 and continually works toward maintaining that status. Accreditation is awarded for a five-year period, and current accreditation for the IOSME expires on January 15, 2013.

On November 6, 2012, the IOSME was inspected for reaccreditation. The results of the inspection will be available in early 2013. Once inspection is passed, the IOSME will again be accredited for a period of five years from the date of the inspection.

## **BUDGET AND STAFFING**

The IOSME receives its funding from the State of Iowa general fund appropriation, charges and fees for autopsies performed and a portion of the fees collected by Vital Records for copies of death certificates.

Fiscal Year	General Fund Appropriation	Autopsy Fees Collected	Death Certificate Fees Collected
FY2000	(transfer) 357,184	0	0
FY2001	514,029	213,500	0
FY2002	544,103	339,000	0
FY2003	497,220	406,100	0
FY2004	511,211	372,395	0
FY2005	526,268	512,100	185,238
FY2006	865,270	707,052	379,320
FY2007	984,981	690,590	383,187
FY2008	1,143,497	879,659	393,162
FY2009	1,262,566	725,943	393,015
FY2010	932,138	864,953	390,655
FY2011	903,782	800,410	402,606
FY2012	852,801	964,800	410,535

Predictions for Fiscal Years 2013 and 2014 are indicated below.

Fiscal Year	General Fund Appropriation	Autopsy Fees Collected	Death Certificate Fees Collected
FY2013	822,084	980,000	400,000
FY2014	822,084	994,000	400,000

The IOSME currently has 13.0 FTEs. Current staff includes:

1 Chief State Medical Examiner	3 Secretaries
1 Deputy State Medical Examiner	2 Medicolegal Death Investigators
2 Associate State Medical Examiners	1 Radiological Technologist
1 Director of Forensic Operations	2 Autopsy Technicians

The IOSME supplements the staffing shortfall with temporary part-time employees. These employees currently are working in the capacity of forensic autopsy technicians, forensic morgue attendants, medicolegal death investigator assistants, and office clerical staff. The number of part-time temporary employees averaged 30 in 2012.

## **GOALS FOR THE FUTURE**

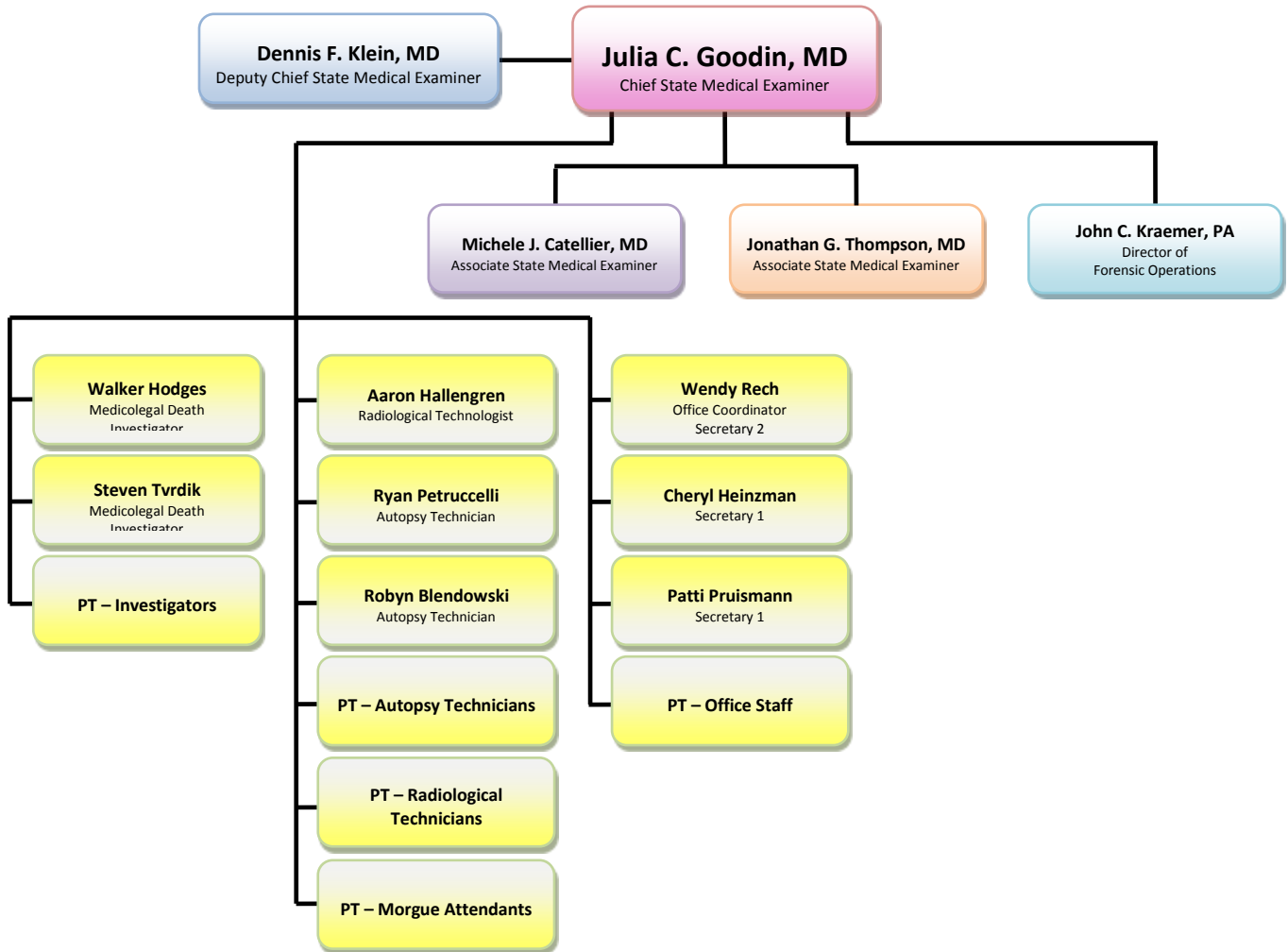
Many of the original goals set in 1999 have been met. Anticipating the needs of the future, goals are updated periodically.

The following are some of the current goals established for the office:

- ✓ Continue to complete the majority of autopsies within 60 days of request and all within 90 days, with an additional goal of completing cases within 30 days when possible.
- ✓ Complete homicide cases within 30 days.
- ✓ Recruit and retain quality staff.
- ✓ Provide a supportive work environment, and promote professional growth and quality.
- ✓ Maintain rotation for fourth-year medical students from Des Moines University and continue Community-based Primary Care Clerkship for medical students from the University of Iowa.
- ✓ Establish a forensic pathology fellowship program.
- ✓ Continue accreditation with the National Association of Medical Examiners (NAME).
- ✓ Promote the work quality of the IOSME so that the citizens of Iowa understand that the IOSME is an independent and objective investigative agency.
- ✓ Establish funding for the continuous operation of the IOSME and allow retention of funds to cover the costs for death investigation and autopsies.
- ✓ Continue to improve mass disasters plans.
- ✓ Continue to develop the Iowa Mortuary Operations Response Team (IMORT) Team, and increase volunteer members and training.

# ORGANIZATIONAL CHART

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## **OVERVIEW - CASES**

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The enclosed statistics encompass years 2000 through 2012.

The statistics included within this report are based on the information provided to IOSME. Researchers interested in additional mortality statistics may contact the Bureau of Vital Records.

Comments or suggestions concerning the content, format, or clarity of the information are encouraged so that we may continue to improve its contents.

## **STATISTICAL INFORMATION**

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The Iowa Office of the State Medical Examiner oversees 99 county medical examiner offices. The following information has been gathered from all 99 counties and reflects the state as a whole. However, there is statistical information provided that reflects how the Iowa Office of the State Medical Examiner performs its duties as the central office. The graphs and information will be labeled according to which entity we are referring.

### **Central Office Numbers for the Year 2012**

**Total medical examiner cases reported in the entire state:**

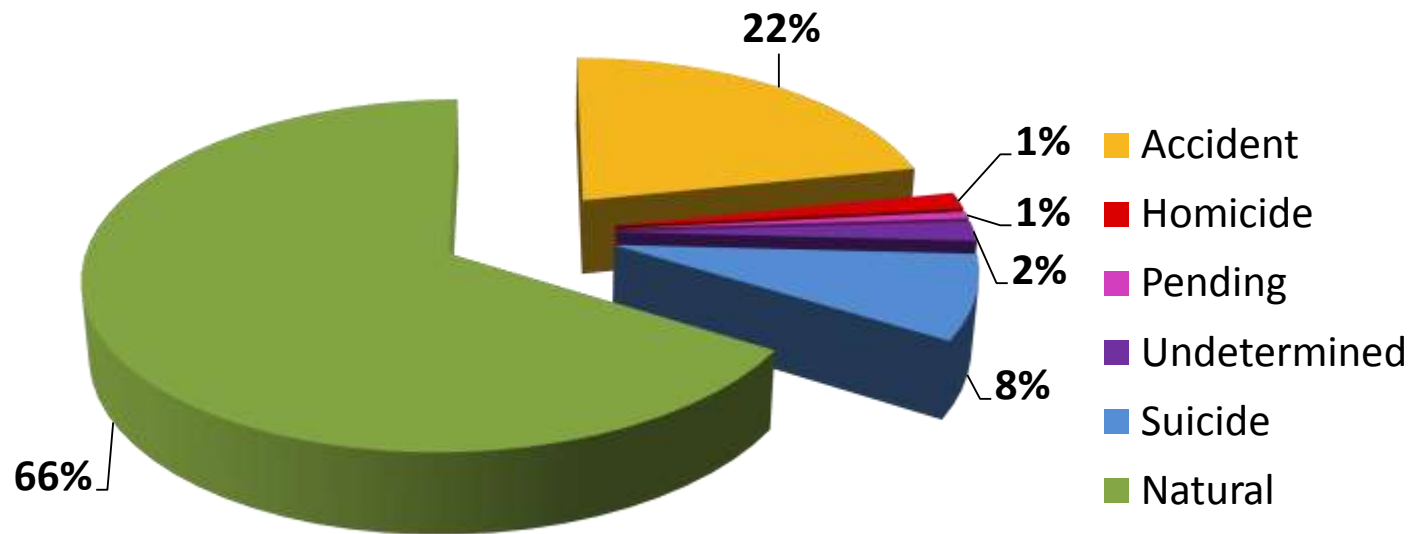
**5,078**

<b>Total cases accepted .....</b>	<b>722</b>
<b>Total scenes attended .....</b>	<b>2</b>
<b>Total bodies transported by office .....</b>	<b>0</b>
<b>External examinations .....</b>	<b>0</b>
<b>Complete autopsies.....</b>	<b>722</b>
<b>Partial autopsies .....</b>	<b>0</b>
<b>Cases where toxicology is performed .....</b>	<b>705</b>
<b>Bodies unidentified after examination .....</b>	<b>0</b>
<b>Organ and tissue referrals/donations.....</b>	<b>313 / 20</b>
<b>Unclaimed bodies.....</b>	<b>0</b>
<b>Exhumations .....</b>	<b>0</b>
<b>Bodies transported to the office .....</b>	<b>722</b>
<b>Hospital autopsies retained under ME jurisdiction.....</b>	<b>0</b>

(Central office does not accept hospital autopsies)

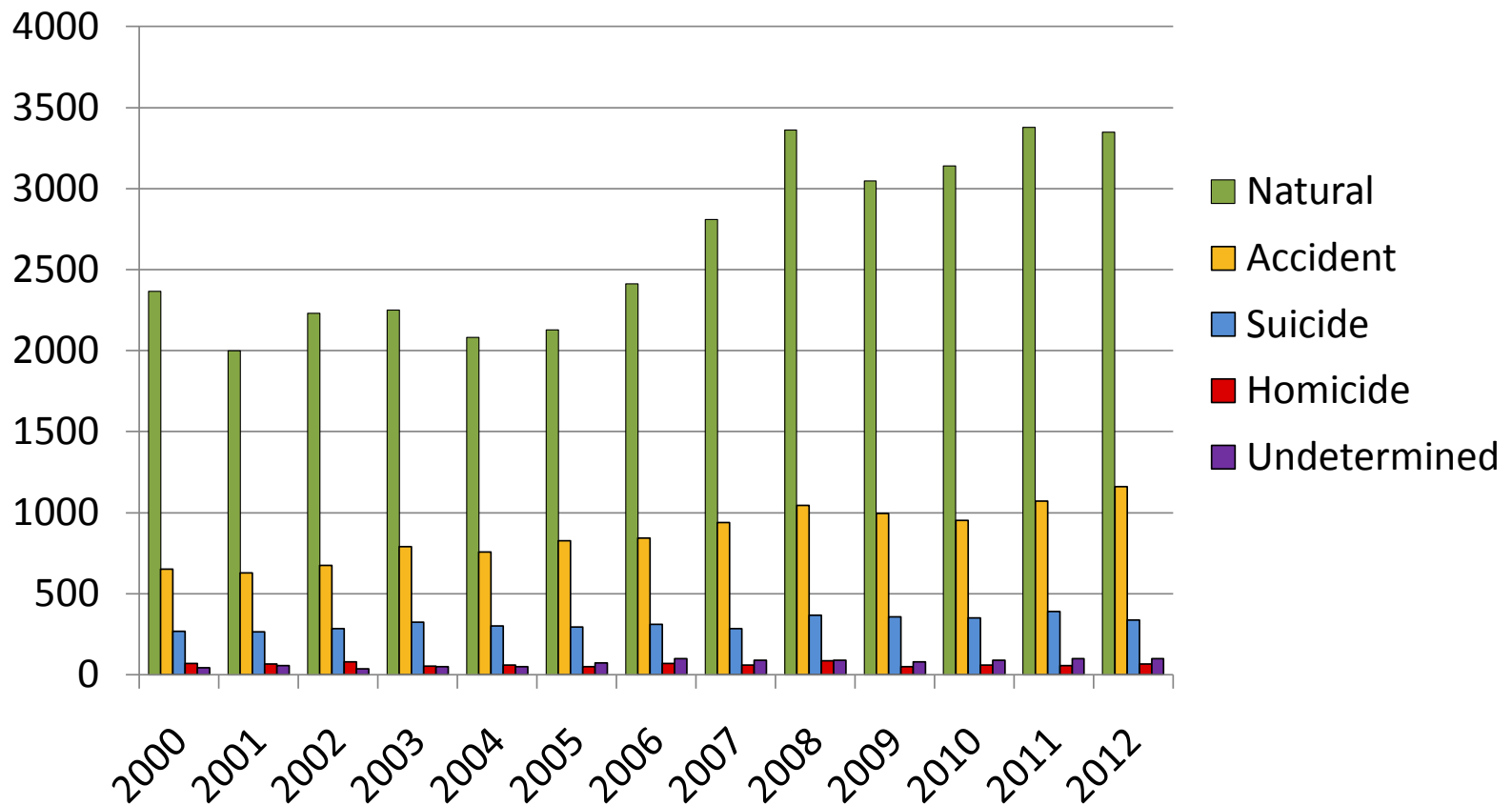
# Iowa County Medical Examiners Investigated 52,363 Deaths From January 2000 through December 2012

Manner of Death





# Iowa Deaths



# Iowa Deaths

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
# of Deaths	27,840	27,241	27,928	27,972	26,811	27,770	27,289	27,126	28,370	27,450	27,682	28,103	28,301
CME Investigated	3,415	3,028	3,337	3,485	3,258	3,380	3,775	4,239	5,011	4,543	4,644	5,049	5,078
% of Total	12.3%	11.1%	12.0%	12.5%	12.2%	12.2%	13.8%	15.6%	17.7%	16.6%	16.8%	18.0%	17.9%
Autopsies Requested	971	1,068	1,238	1,310	1,377	1,471	1,501	1,441	1,543	1,391	1,483	1,548	1,503
% of ME Cases	28%	35%	37%	38%	42%	44%	40%	34%	31%	31%	32%	31%	30%

## ME Cases – Manner of Death

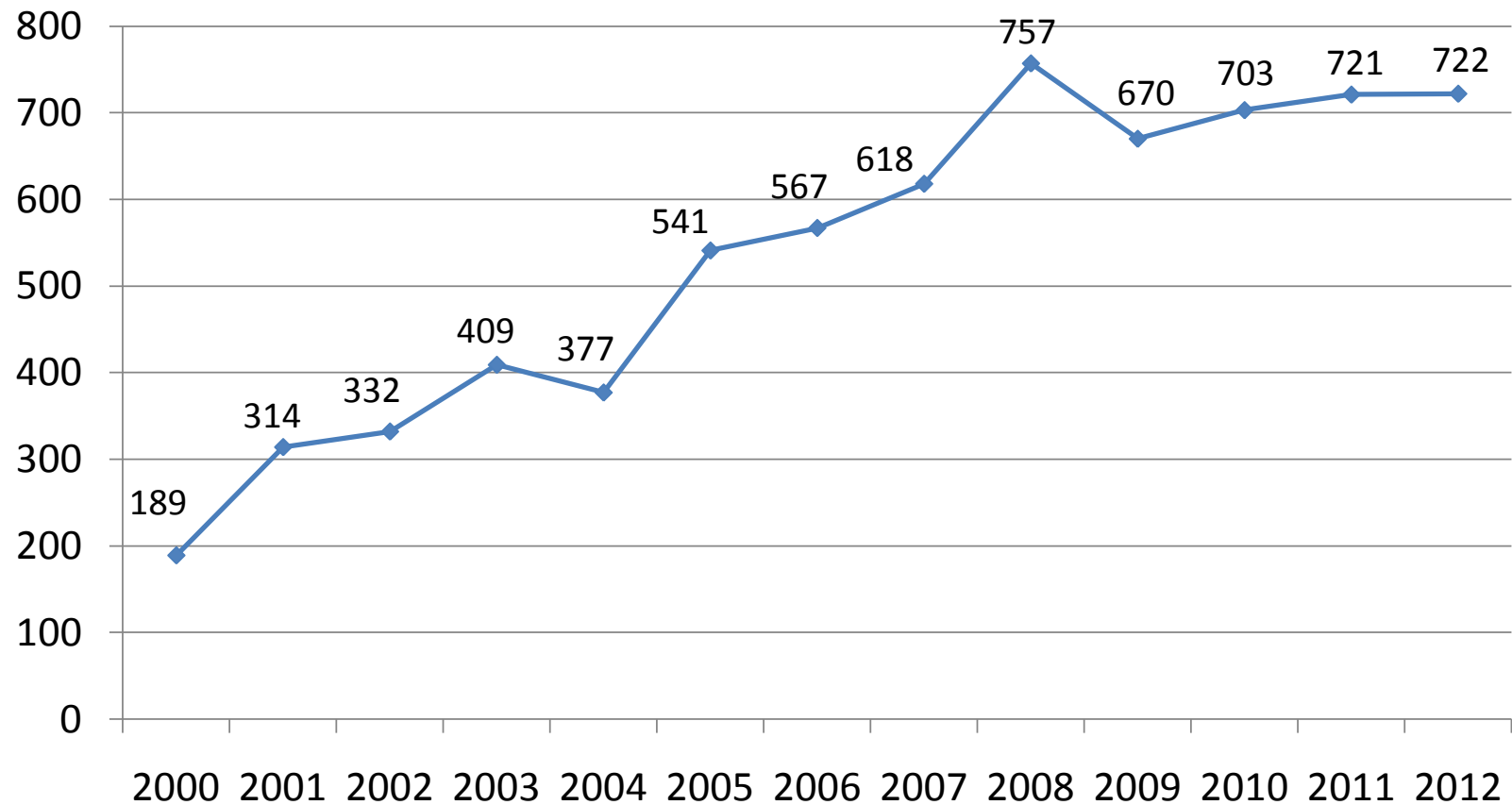
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>NATURAL</b>	2,366	1,999	2,228	2,246	2,081	2,124	2,410	2,808	3,343	2,990	3,110	3,366	3,347
% of ME Cases	69%	66%	67%	64%	64%	63%	64%	66%	67%	66%	67%	68%	66%
<b>ACCIDENT</b>	653	629	675	791	755	826	840	940	1,044	990	947	1,066	1,161
% of ME Cases	19%	21%	20%	23%	23%	24%	22%	22%	21%	22%	20%	21%	23%
<b>SUICIDE</b>	267	266	286	325	299	294	309	288	371	357	350	389	339
% of ME Cases	8%	9%	9%	9%	9%	9%	8%	7%	7%	8%	8%	8%	7%
<b>HOMICIDE</b>	69	68	78	54	61	50	71	61	87	51	59	58	66
% of ME Cases	2%	2%	2%	2%	2%	1%	2%	1%	2%	1%	1%	1%	1%
<b>UNDETERMINED</b>	43	55	37	50	48	73	91	85	82	76	83	97	99
% of ME Cases	1%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%

# Deaths Reported to County Medical Examiners

## (Number Autopsied in Parenthesis)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
NATURAL	2,366	1,999	2,228	2,246	2,081	2,124	2,410	2,808	3,343	2,990	3,110	3,366	3,347
	(415)	(470)	(547)	(537)	(552)	(540)	(521)	(476)	(489)	(424)	(460)	(478)	(443)
ACCIDENT	653	629	675	791	755	826	840	940	1,044	990	947	1,066	1,161
	(330)	(335)	(391)	(471)	(485)	(563)	(542)	(564)	(598)	(538)	(591)	(589)	(617)
SUICIDE	267	266	286	325	299	294	309	288	371	357	350	389	339
	(109)	(140)	(158)	(184)	(215)	(237)	(247)	(226)	(253)	(251)	(252)	(293)	(254)
HOMICIDE	69	68	78	54	61	50	71	61	87	51	59	58	66
	(69)	(68)	(76)	(54)	(61)	(50)	(71)	(61)	(86)	(48)	(58)	(57)	(66)
UNDETERMINED	43	55	37	50	48	73	91	85	82	76	83	97	99
	(32)	(44)	(34)	(46)	(48)	(72)	(88)	(83)	(76)	(68)	(79)	(85)	(88)
PENDING	11	9	30	16	6	5	22	31	28	51	29	44	45
	(11)	(9)	(29)	(15)	(6)	(5)	(19)	(25)	(25)	(42)	(25)	(33)	(31)

# Deaths Autopsied by the Iowa Office of the State Medical Examiner



## DEATHS BY MANNER OF DEATH

**2012**  
**(Central Office Only)**

### ACCIDENT

Alcohol	7
Drug Use	42
Mixed Drug and Alcohol	6
Asphyxia	22
Blunt Force Injury	144
Cardiac - non-atherogenic	3
Coronary Artery Disease	15
Drowning	26
Electrical	1
Embolism	1
Exposure	9
Fire	13
Firearm	1
Hanging	2
Poisoning	6
Other	3
	<hr/>
	301

### NATURAL

Coronary Artery Disease	72
Cardiac - non-atherogenic	24
Cerebrovascular	2
Chronic Alcohol	7
Congenital Defect	2
Diabetes	3
Embolism	16
Exsanguination	1
GI Hemorrhage	3
Hypertension	11
Infectious Disease	7
Neoplasm	2
Pulmonary Disease	10
Seizure	7
Other	4
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	171

### HOMICIDE

Asphyxia	6
Blunt Force Injury	9
Cardiac - non-atherogenic	2
Drowning	1
Firearm	23
Infection	1
Infectious Disease	1
Mixed Drug and Alcohol	1
Other	2
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	46

### SUICIDE

Asphyxia	3
Blunt Force Injury	7
Drowning	1
Drug Use	16
Fire	2
Firearm	66
Hanging	39
Medical Noncompliance	1
Poisoning	4
Sharp Force Injury	3
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	142

### UNDETERMINED

Blunt Force Injury	2
Cardiac - non-atherogenic	2
Cerebrovascular	3
Drug Use	10
Embolism	1
Firearm	2
Infectious Disease	1
Poisoning	1
Pulmonary Disease	1
SIDS	2
SUID	14
Undetermined	18
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## **SUMMARY**

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The Iowa Office of the State Medical Examiner (IOSME) has made tremendous progress in improving the oversight, guidance, and assistance to county medical examiners throughout the State of Iowa since its move to the Department of Public Health in 1999.

In addition to improved oversight and guidance, the IOSME has also responded to a marked increase in the number of autopsies requested to be performed at the State Medical Examiner's Office. The main reason for the increase is due to the decrease in availability of pathologists throughout the State either willing or trained to perform forensic autopsies. The office has seen an increase in the number of yearly autopsies from under 200 in 2000 to a high of 757 in 2008. The final number of autopsies performed in 2012 was 722.

In 2012, major steps toward acquisition of a case management system were accomplished. A software program was purchased from Forensic Advantage Systems with funds awarded the IOSME from the competitive Coverdell grant. The IOSME is in the process of determining hardware needs and hosting set-up. Competitive Coverdell grant funds will be used to acquire the hardware necessary to support the new software. Once fully implemented, the case management system will provide a web portal that will allow county medical examiners and investigators to input investigation information and pull reports.

Education continues to be a priority. Eight county medical examiner investigators attended the St. Louis Medicolegal Death Investigation Course in 2012, paid for by federal Coverdell grant money acquired by the IOSME. Plans are to continue applying for this grant so additional county medical examiners and investigators may attend in the future. The course prepares death investigators to take the American Board of Medicolegal Death Investigators (ABMDI) Registry or Board certification test. Iowa now has twenty-eight ABMDI registry-certified and four board-certified medicolegal death investigators.

The IOSME provides opportunities for Des Moines University medical students to participate in two-week or four-week rotations through our office to observe and assist with autopsies. Extensive training in pathology is provided by the medical examiners during the students' time in our office. In addition, radiology technology students participate in three-day or one-week rotations, also observing autopsies and assisting with radiological examinations.

The IOSME continues to support and participate in the annual educational fall conference of the Iowa Association of County Medical Examiners. This is in

addition to lectures provided by IOSME staff to attorneys, law enforcement, pathology residents, and mortuary science students throughout the year.

The IOSME manages its own website at [www.iosme.iowa.gov](http://www.iosme.iowa.gov). It contains pages specifically for funeral homes, families, law enforcement, and the county medical examiners. This is a major step in communicating with families and making information available to them. The next-of-kin can download a form to request a copy of the autopsy report, and information about our office is readily available to them. In addition, county medical examiners and funeral homes can download forms specific to their needs. Also included are links to other agencies, a brief history of the IOSME, and Iowa Code and Administrative Rules pertinent to our office.

To ensure high quality death investigation, county medical examiners and county medical examiner investigators must have special medical knowledge in forensic medicine. The Iowa Office of the State Medical Examiner (IOSME) is responsible for training and oversight for death investigations in Iowa. “ME101: A Primer for Medical Examiners and Medical Examiner Investigators” was established in 2007 and has been presented at fourteen locations across the state. This four-hour training seminar covers competency skills for medicolegal death investigations. Participants in this course are expected to fulfill the following objectives:

- Learn basic concepts in medicolegal death investigation, such as cause and manner of death and body identification.
- Practice skills in photography, documentation, and forensic pathology through didactic instruction and participating in mock death scenes.
- Gain knowledge in the medicolegal system and administrative rules pertinent to death investigation in the state of Iowa.
- Understand which cases come under medical examiner jurisdiction and which ones need to have an autopsy.
- Discover strategies for establishing cost effective contracts for body transportation and reimbursement for medicolegal death investigations.

Participants complete course evaluations for each ME101 session. In response to a repeated comment in these evaluations, the IOSME produced a sequel program, ME102, which includes reviewing many of the core basics, as well as more advance topics. New to ME102 is a more in depth discussion of death certification, how to avoid potential pitfalls, and the importance of the autopsy findings in determining cause and manner of death. As part of ME102, participants have the opportunity to practice photography skills and have the photographs critiqued in class. Since many of the participants taking ME102 have some previous instruction and experience, ample opportunity is provided for



participants to ask specific questions that have come from problems or difficulties out in the field. During 2012, two ME102 courses were held for Iowa County Medical Examiners and Investigators.

In November 2012, the IOSME hosted the annual Iowa Mortuary Operations Response Team (IMORT) training and exercise. Team members participated in using equipment from the disaster response trailer to include generators, lighting, portable shelters, and Dexis Dental Imaging technology. Team members also participated in a recovery exercise involving grid formation, body recovery, and documentation.

The IOSME endeavors to improve service in death investigation through involvement of employees in the Child Death Review Team, the Iowa Mortuary Operations Response Team, the Strangulation Task Force, the Fatality Assessment and Control Evaluation (FACE) program, and training other state agency personnel; creating training opportunities for county medical examiners and investigators so they can better serve their constituents; and teaching classes, giving lectures, and working with local universities and colleges to provide students with hands-on training for their future careers as forensic pathologists or other doctoral specialties, radiologic technologists, and mortuary science professionals.

The Iowa Office of the State Medical Examiner looks forward to continuing excellence in service to the citizens of Iowa.

Iowa Office of the State Medical Examiner  
Annual Report 2012

Julia C. Goodin, MD  
Chief State Medical Examiner

Iowa Department of Public Health  
Mariannette Miller-Meeks, MD, Director

State of Iowa  
Terry E. Branstad, Governor

